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Exhibit 9

Montana's Comprehensive & Efficient Gage Network

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Revision the network and responsibility for water measurement and access to data in Montana to meet the needs and demands on water quality and quantity.

A cooperative, strategic approach to stream gages and payments in Montana.

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Problem: The United States Geological Survey (USGS) gage network (~~140~~ sites in Montana) that reports stream flow and water temperature in Montana has come under recent significant funding cuts, putting a large portion of the network at risk of being shut down. The funding for gages is often in jeopardy, causing an annual funding scramble.

The USGS provides high quality, publically accessible and transparent data through the USGS website. The most common data resources are real-time continuous stream flow and gage height. Water temperature is often included. Additional parameters are also available. USGS provides tools for reviewing and displaying data. Other entities may report USGS data by imbedding results on website or mobile apps.

There are three important players in the discussion of gages. There are "Users", "Payers", and "Indirect Beneficiaries". These are defined as the following:

User: Any individual, agency, entity, or operator of an agreement or plan that has a direct use and outcome related to the gage operation. This includes, but is not limited to, operators of state and local drought response plans, agencies overseeing point-source permits, irrigators, recreation businesses, agencies overseeing plans or agreements tied to streamflow conditions.

Payers: Any individual, agency, or entity that pays for USGS gage agreements.

Indirect Beneficiaries: Any individual, agency, entity, or agreement that has an indirect or secondary benefit to the gage network.

For example: Instream flows are maintained when a local conservation group operates a voluntary drought management plan that coordinates irrigators to meet minimum flow targets. The minimum target flow is measured by gages that are operated by Montana Fish, Wildlife and Parks. Meeting the minimum flow target supports a healthy fishery and the fishing industry. The conservation group and the Drought Management Plan is the "User". Montana Fish, Wildlife and Parks is the "Payer". The fishery and the fishing industry is the "Indirect Beneficiary". In some cases, a role may cross categories, such as when a fishing industry player both uses the gages to direct their operations and benefits from a healthy fishery – both a "User" and an "Indirect Beneficiary" or an irrigator may participate in drought response as a "User" while also benefiting from higher instream flows as an "Indirect Beneficiary".

The cost of the gages is spread among many private, public (state and federal), and non-profit entities. The gage network composition (which gages are turned on or off annually) is largely driven by decisions made within a single agency, or locally among small groups of entities – typically the payer. The full value or need of gages is underrepresented because paying entities are all or in part disconnected from each other and users are disconnected from payers. Specifically, the burden of funding and decision making on gage payments on one agency may be disconnected from the users of the gage. This disconnect results in loss of cost-share opportunities, may push funding towards lower priority gages and away from high priority gages, and offers little opportunity for strategic application of state-wide monitoring.

Furthermore, the gage network has expanded greatly over 20 years, most in the last 10 years. During this era technology and internet access has also expanded. The degree to which data is accessible and therefore the users and public ability to apply the information the gages provide has also complicated the gages importance.

Montana's recreation and ranching economy, healthy aquatic ecosystem, and growing population are dependent on abundant, cold and clean water and requires access to reliable, accurate, and transparent long-term data on water flow and temperature. Montana's future and participation in success is dependent on ample water quality and quantity.

Proposed Solution:

Montana identifies USGS stream gaging as a fundamental need for the state (outside of individual agencies).

A state-wide council is assembled made up critical payers, users, and decision makers. This group together coordinates and ensures payment for Montana's USGS gage network by:

- Create a private funding avenue to incorporate private investment into gage payment needs that can be leveraged with other payers.
- Maximize USGS cost-share opportunities by consolidating gage agreements;
- Leverage multi-payer payments by consolidating USGS agreements;
- Work together to prioritize the most critical gages in the state by understanding the needs and limitations of the payers, the users, and the resource;
- Agree to participate in the council and work to follow the path identified agreed to;
- Have access to state allocated funds to support gages outside of a specific agency;
- Support alternatives to USGS gages were applicable (i.e. where a lower cost gage such as the DNRC real-time network, is a cost-effective and reasonable alternative)

By working together, the council will have the opportunity to provide stream gaging statewide in a consistent, coordinated basis. The council can serve as a one-stop-shop for interests looking to support of gages.

Current Step: A small working group has been established to consider options and coordinate across entities on this issue.

Request: Support the working group to identify next steps.

Case Study

The Big Hole River

The Big Hole River is the most gaged river in Montana, monitored by 10 USGS gages along its 156-mile voyage. The extensive gage network was created under multiple pretenses. The first gage was the Melrose gage with the earliest data establishing 93-year period of record for what later become a contentious river. It was followed by USGS gage at Wise River, installed 1979. As the 1980's became the apex of a series of drought years occurring before any drought response or coordinated water withdrawals, a rapidly declining arctic grayling population, and poor habitat quality brought the Big Hole River flows and lack thereof into the spotlight. In 1988, the Big Hole River at Wisdom ran dry for 35 consecutive days – the same year the USGS Gage at Wisdom was installed.

In 1994 the US Fish and Wildlife Service intervened to call out the Arctic graylings struggling populations as a Candidate for Endangered Species Listing. Environmentalists took the need further, threatening to sue irrigators for their destruction of the fishery.

The Big Hole River was unraveling into chaos, in dire need of coordinated effort to support the river and the fishery.

In August 1994 after a tour on the Big Hole River with the Legislative Water Policy Committee, 6 ranchers sat down to write a letter to Governor Marc Racicot asking for help to set up a committee to deal with problems on the river. Their intention was to seek positive actions instead of reacting to negative reports.

Water right holders were invited to a meeting January 1995 and met several times that spring. The group created a format that would appoint 2 ranchers from each of 4 river stretches. The next step was to invite other interests, a difficult move for the ranchers, who had found themselves at odds with some outside interests. And yet, they knew involving diverse interests was a key to success. They included water utility, businesses, conservation groups, conservation districts, guides & outfitters, local government, and sportsmen.

The new group met for the first time as the "Big Hole Watershed Committee" (BHCW) later that year. Determining they needed support to be organized, the group involved the Montana Consensus Council.

Only weeks after the group formed, and with Montana Consensus Council support, they faced their first challenge. In the prior legislative session, Montana Department of Natural Resources and Conservation (DNRC) was directed to study rivers that were candidates for "Chronically Dewatered" listing. The study proposed listing the Big Hole River as Chronically Dewatered, a designation that would require control and measurement of all irrigation diversions. The Big Hole River was identified as a candidate after a 1993 survey that cited, while historical conflicts over water had been resolved at a local level successfully, future cooperation may be in jeopardy due to changes in land ownership and increasing demand. There was heavy local resistance to the designation and concern the new BHCW would be in jeopardy.

The newly formed BHCW swayed DNRC to delay the decision and allow the committee to identify solutions to water issues that needed to be resolved. The BHCW was in favor of local committee and local control rather than of state or federal control of resources. The group worked quickly, scheduling a series of educational meetings to learn about water management, history, and options, and formulated a work plan.

In 1997, three more USGS gages were added – The Bureau of Land Management supported the Mudd Creek gage, and the Maiden Rock and Glenn gage were supported by Montana Fish, Wildlife and Parks.

One of their first milestones came in 1997, enacting the first Drought Management Plan in the state. The plan used voluntary participation to meet target river flows and is still in place today. The plan created three river sections and set flow targets at three USGS gage stations – Wisdom, Wise River, and Melrose. The group would work with local irrigators and water users to voluntarily meet flow targets and protect the fishery rather than be led by state or federal control using a “Shared Sacrifice, Shared Success” model.

In 2004, conditions worsened. Grayling were proposed for emergency Endangered Species Act listing and likely subsequent permanent listing. The Center for Biological Diversity sued USFWS over the grayling and suggested they may sue individual irrigators. The BHCWC met with partners and advisors and strengthened efforts.

Montana Fish, Wildlife and Parks administered the Upper Big Hole Candidate Conservation Agreement with Assurances (CCAA) in 2005 in partnership with Montana Department of Natural Resources and Conservation, Natural Resources Conservation Service, and US Fish and Wildlife Service. The CCAA enrolled landowners in site plans to benefit grayling in exchange for some litigation protection. The CCAA operated in the Upper Big Hole River from the headwaters to Dickie Bridge, divided into five sections and each monitored with a USGS gage. The site plans included flow agreements to meet flow targets and are tied to 5 USGS gages.

The Big Hole River Drought Management Plan is revised annually and in 2017 divided the Big Hole River into five river sections from headwaters to mouth. Each of the five river sections is assigned to a USGS gage for flow targets and temperature response.

The Big Hole Watershed Committee is a contributing payer on 7 USGS gages, with an annual total payment of \$8700-\$9000/year.

The DNRC, satisfied with progress, still has not issued Chronically Dewatered Status on the Big Hole River.

In 2014, USFWS announced the Arctic grayling did not warrant listing under the Endangered Species Act, citing successful conservation efforts. As of 2018, 33 landowners are enrolled in the CCAA Program, including 33 flow agreements.

As of 2018, 6 of 10 Big Hole River gages are in jeopardy to be cut, have been cut, or will require alternate funds.

The following tables represent the matrix of USGS gages Users and Payers for the Big Hole River:



Big Hole River Gages (Dots) and Drought Management Sections

Big Hole River USGS Gage Payer	Total 2017 Payments	Percent of Total 2017 Payment
Big Hole Watershed Committee	\$8,725.00	8.7%
Montana Fish, Wildlife and Parks	\$26,600	26.3%
Montana Department of Natural Resources and Conservation	\$13,955.00	14%
Bureau of Land Management	\$12,970.00	13%
US Geological Survey	\$38,375.00	38%
Total 2017 Payment	\$100,625.00	